# **BID SOLICITATION**



# **SEALED BIDS**

Mail or submit two (2) signed copies of bid form to this office in the enclosed envelope. Retain one copy for your file

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# **BID OPENING DATE AND TIME:**

1-12-10

at 2:00 PM

BID NUMBER:

71648

BUYER: GEOF HIPP

PHONE #: (423) 757-5184

**DELIVERY REQUIRED:** 

MAILT

CITY OF CHATTANOOGA

Purchasing Dept 101 East 11<sup>th</sup> St, Room G-13 Chattanooga, TN 37402

ALL BIDS MUST BE SIGNED -- The undersigned offers the above

0 Class-Item Unit Item Quantity **Unit Price** Total Requisition No.: 21648 Ordering Dept.: Waste Resources Buyer: Geoffrey Hipp 423-757-4758 e-mail: hipp\_g@mail.chattanooga.gov ITEMS TO BE PURCHASED: Reversing Heat Exchanger for Cryogenic Air Separation \*\*\*\*\*\*\*\*\*\*\* ATTACHMENTS: - Specifications - Affirmative Action Plan - Standard Terms and Conditions: (http://www.chattanooga.gov/Gen\_Serv/4060\_StandardTerms andConditions.htm or call for copy) \*\*\* BIDS MUST BE RECEIVED NO LATER THAN \*\*\* 2:00 PM ON JANUARY 12, 2010 \*\*\*\*\* PLEASE SUBMIT BIDS IN DUPLICATE INDICATING **REQUISITION NUMBER (21648) ON OUTSIDE PACKAGING** ALL ITEMS MUST BE QUOTED F.O.B. DESTINATION. FREIGHT ALLOWED \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* NOTE: All bids received are subject to the terms and conditions contained herein and as listed in the above referenced website. The undersigned Bidder acknowledges having received, reviewed, and agrees to be bound to these terms and conditions, unless specific written exceptions are otherwise stated. ALL BIDS MUST BE SIGNED.

The City is Exempt from all Federal and State Tax.	question de destauteurs de la literation
Bids will be received at the above mentioned address.	COMPANY:
TERMS OF PAYMENT:	SIGNATURE:
TELEPHONE NUMBER:	NAME AND TITLE:

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Purchasing Dept 101 East 11<sup>th</sup> St, Room G-13 Chattanooga, TN 37402

Item Class-Item Quantity Unit Unit Price Total

The City of Chattanooga reserves the right to reject any and/or all bids, waive any informalities in the bids received, and to accept any bid which in its opinion may be for the best interest of the city.

The City of Chattanooga will be non-discriminatory in the purchase of all goods and services on the basis of race, color, or national origin.

PLEASE PROVIDE US WITH THE FOLLOWING INFORMATION:

Address\_\_\_\_\_

Company Name\_\_\_\_\_\_

E-Mail Address \_\_\_\_\_\_

Contact Person's Name \_\_\_\_\_\_\_

Estimated Delivery\_\_\_\_\_\_\_

Minority-Owned Business \_\_\_ Small Business \_\_\_

Minority Woman Owned Business \_\_\_\_ Veteran \_\_\_\_

Women-Owned Business \_\_\_ Disabled \_\_\_ Veteran \_\_\_

MOTE: ALL BIDS RECEIVED ARE SUBJECT	I TO THE TERMS AND CONDITION	NS

The City is Exempt from all Federal and State Tax. Bids will be received at the above mentioned address.

TERMS OF PAYMENT: \_\_\_\_\_

TELEPHONE NUMBER:

ALL BIDS MUST BE SIGNED – The undersigned offers the above quoted prices under the conditions contained herein.

COMPANY: \_\_\_\_\_

SIGNATURE:

NAME AND TITLE:

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DELIVERY REQUIRED:

M

CITY OF CHATTANOOGA

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Purchasing Dept 101 East 11<sup>th</sup> St, Room G-13 Chattanooga, TN 37402

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ltem	Class-Item	Quantity	Unit	Unit Price	Total
1	Reversing Heat Exchanger for existing Cryogenic Air Separation Facility as per attached specifications	the <sup>1</sup>	Each		
	NOTE: ALL BIDS RECEIVED ARE SUBJECT	T TO THE TERM	MS AND CON	DITIONS.	

ALL BIDS MUST BE SIGNED - The undersigned offers the above quoted prices under the conditions contained herein.

The City is Exempt from all Federal and State Tax. Bids will be received at the above mentioned address.

TERMS OF PAYMENT:

TELEPHONE NUMBER: \_\_\_\_\_

COMPANY: \_\_\_ SIGNATURE: \_\_\_\_\_\_

NAME AND TITLE: \_\_\_\_\_

# EQUIPMENT PROCUREMENT SPECIFICATIONS FOR

# REPLACEMENT REVERSING HEAT EXCHANGERS FOR EXISTING CRYOGENIC AIR SEPARATION FACILITY MOCCASIN BEND WASTEWATER TREATMENT PLANT CHATTANOOGA, TENNESSEE

(December 2009)

# 1.0 GENERAL

## 1.1 SCOPE OF SERVICES

The Scope of Services included in these Specifications shall be for all labor, benefits, materials, equipment, fuel, and any other related expenses necessary to provide replacement reversing heat exchanger(s) described herein for the cryogenic air separation facility at the Moccasin Bend Wastewater Treatment Plant (MBWWTP), 455 Moccasin Bend Road, Chattanooga, Tennessee 37405.

The reversing heat exchangers provided MUST be an exact replacement for the existing Trane model, serial number 9-7010-18, National Board Number 159406 and 159407, built in 1979, to be used in the City's Union Carbide (Linde Division) 145-ton cryogenic air separation facility.

Any questions or comments related to the services described in these specifications may be directed to the Plant Superintendent or the Plant Engineer at Moccasin Bend Wastewater Treatment Plant, 455 Moccasin Bend Road, Chattanooga, Tennessee 37405 (423) 757-5026.

# 1.2 BASIS OF BIDDING

The Contractor shall submit a bid on the City's Standard Bid Form. The Bid shall include the following:

One (1) lump sum cost of the reversing heat exchanger, and any requested and/or necessary accessories, including the cost of shipment of completed products to Moccasin Bend Wastewater Treatment Plant.

The City of Chattanooga reserves the right to reject any and/or all bids, to waive any information in Bids received, and to accept any Bid which in its opinion may be in the best interest of the city.

- 1.3 NOT USED
- 1.4 SUBMITTALS
- 1.4.1 BID BOND

Not Required

1.4.2 PERFORMANCE BOND

None Required.

## 1.4.3 QUALIFICATIONS

- A. The Vendor/manufacturer of the heat exchanger(s) shall submit documentation of qualifications in the manufacturer of exact replacement for the existing Trane model, serial number 9-7010-18, National Board Number 159406 and 159407, built in 1979, to be used in the City's Union Carbide (Linde Division) 145-ton cryogenic air separation facility.
- B. When requested by the City, an acceptable list of installations with similar heat exchangers shall be provided by the Vendor /manufacturer demonstrating compliance with these requirements.

## 1.5 GENERAL CONDITIONS AND INSTRUCTIONS TO BIDDERS

The Vendor/manufacturer shall comply with rules and conditions found in the City of Chattanooga, Purchasing Department's "General Conditions and Instructions to Bidders" that are a part of the invitation to Bid for the equipment or services specified herein.

# 1.6 WARRANTY

The Vendor/manufacturer shall warrant and guarantee the heat exchanger(s) and related accessories for a period of eighteen (18) months following delivery and receipt of the heat exchanger(s) to the City's Moccasin Bend WWTP and for a period of one (1) year of operation. The work shall be guaranteed and warranted against defective workmanship and materials.

# 2.0 PRODUCTS, SERVICES, AND OTHER REQUIREMENTS

# 2.1 COMPLIANCE WITH APPLICABLE REGULATIONS

All of the products and services provided by the Vendor/manufacturer shall be completed in a good and workmanlike manner. All products and services provided shall be in compliance with all applicable statues, rules, ordinances and regulations of, but not limited to, the USEPA, TDOT, OHSA, and any similar federal, state, and local laws or regulations applicable to the Vendor/manufacturer or applicable to the products and services described herein.

The Vendor/manufacturer personnel shall comply with all City, Waste Resources Division, and Moccasin Bend WWTP work rules and regulations when on site.

#### 2.2 DESCRIPTION OF PRODUCTS AND SERVICES

## 2.2.1 GENERAL SPECIFICATIONS

The heat exchanger(s) will be designed and constructed in accordance with ASME Code.

All equipment will be manufactured according to standards set forth by ALPEMA. The heat exchanger(s) will receive hydrostatic (1.3 X design pressure) or pneumatic testing (1.15 X design pressure) as required by current ASME Code.

The heat exchanger will provide the same performance as the design per Trane Drawing 6495 although will be manufactured to current standards. All flange and support locations will be maintained per Trane Drawing 6495. (The City cannot supply this proprietary drawing.)

Reference is made to original equipment manufacturer Drawing No. A909-7010, which shall serve as the basis for manufacture of replacement heat exchanger(s). (The City cannot supply this proprietary drawing.)

Unit will be cleaned for Oxygen Service. Testing to be per NDE and ASME Code.

## 2.2.2 DETAILS FROM THE O.E.M. DATA PLATES

# Unit 1:

Manufacturer: Trane

Manufacturer Serial Number: 9-7010-18

National Board Number: 159406

Year Built: 1979

U.C.C./Linde Part Number: 2049017 U.C.C./Linde P.O. Number: 815-46010-B U.C.C./Linde Project Number: 7862

Individually		Simultaneous	ly	
Process Stream:	<u>AB</u>	CD	AB	CD
Working Pressure, psig:	110	110	110	110
Pneumatic Test Pressure, psig:	150	160	150	150
Hydro Test Pressure, psig	350	220	425	
Working Temperatures: +150°F max	to -450	)°F min.		

#### Unit 2:

Manufacturer: Trane

Manufacturer Serial Number: 9-7010-18

National Board Number: 159407

Year Built: 1979

U.C.C./Linde Part Number: 2049017 U.C.C./Linde P.O. Number: 815-46010-B U.C.C./Linde Project Number: 7862

	Individ	dually	Simultaneously	/
Process Stream:	AB	CD	AB CD	
Working Pressure, psig:	110	110	110 110	
Pneumatic Test Pressure, psig:	150	160	150 150	
Hydro Test Pressure, psig	350	220	425	
Working Temperatures: +150°F max	. to -45	60°F min.		

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# 2.2.3 SUBMITTALS - FOR REVEW/APPROVAL

Prior to manufacturer of equipment, vendor shall submit complete sets of shop drawings for the two individual units for review by the City of Chattanooga.

Prior to shipment, vendor shall submit all applicable mechanical data sheets indicating results of pressure testing, leak testing, and other applicable testing.

Vendor/manufacturer shall also submit to City of Chattanooga a list of approved, certified installers of the heat exchanger(s). (Installation will be through a separate contract subsequent to award of this equipment purchase.)

# 2.2.4 DELIVERY, STORAGE, AND HANDLING

Vendor/manufacturer shall arrange for shipment of heat exchanger(s) to the City of Chattanooga Moccasin Bend Wastewater Treatment Plant. All costs associated with shipment of product shall be included as a separate bid item on the bid as specified in Section 1.2.

The heat exchanger(s) and related accessories shall be handled and stored in accordance with manufacturer's instructions. One (1) copy of these instructions shall be included with the heat exchanger(s) and related accessories at the time of shipment.

# 2.2.5 MANUFACTURERS

The reversing heat exchangers provided MUST be an exact replacement for the existing Trane model(s).

# 3.0 EXECUTION

# 3.1 FACTORY TESTING

Factory testing shall be as specified in Section 2.2.1 of these specifications.

# 3.2 PAYMENT OF SERVICES

- A. Partial payments shall be made as follows:
  - 20% of the lump sum price for heat exchanger(s) shall be made upon receipt of shop drawings by City of Chattanooga.
  - 50% of the lump sum price for heat exchanger(s) shall be made at the mid-

point of the delivery schedule (half way between time of receipt of purchase order and date of delivery).

- 25% of the lump sum price for heat exchanger(s) shall be made at the time products are complete and ready to ship.
- 5% of the lump sum price for heat exchanger(s) and 100% of the lump sum price for shipping will be made upon receipt of product in good condition at the Moccasin Bend Wastewater Treatment Plant.

The City reserves the right to inspect product(s) during these cycles at the place of manufacturer prior to approval of payment.

B. Payment request shall be submitted to the Moccasin Bend Wastewater Treatment Plant, 455 Moccasin Bend Road, Chattanooga, Tennessee 37405.

# Affirmative Action Plan

The City of Chattanooga is an equal opportunity employer and during the performance of this Contract, the Contractor agrees to abide by the equal opportunity goals of the City of Chattanooga as follows:

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or handicap.
- 3. The Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. During the term of all construction contracts or subcontracts in excess of \$10,000 to be performed for the City of Chattanooga, the following non-discriminatory hiring practices shall be employed to provide employment opportunities for minorities and women:
  - a. All help wanted ads placed in newspapers or other publications shall contain the phrase "Equal Employment Opportunity Employer".
  - b. Seek and maintain contracts with minority groups and human relations organizations as available.
  - c. Encourage present employees to refer qualified minority group and female applicants for employment opportunities.
  - d. Use only recruitment sources which state in writing that they practice equal opportunity. Advise all recruitment sources that qualified minority group members and women will be sought for consideration for all positions when vacancies occur.

- 5. Minority statistics are subject to audit by City of Chattanooga staff or other governmental agency.
- 6. The Contractor agrees to notify the City of Chattanooga of any claim or investigation by State or Federal agencies as to discrimination.